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JOSEPH BACH 17460 LAKEVIEW DRIVE MORGAN HILL, CA 95037			EXAMINER CUTLER, ALBERT H	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/811,433	Applicant(s) CHOU, ALEX	
	Examiner Albert H. Cutler	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This office action is responsive to application 10/811,433 filed on March 25, 2004. Claims 1-9 are pending in the application and have been examined by the examiner.

#### ***Specification***

2. The disclosure is objected to because of the following informalities: Lack of clarity and precision.

Consider page 5, lines 8-19, the mobile device is referred to as number 32. However, it appears from the drawings, and elsewhere in the specification, that the mobile device should be labeled with reference number 30. Appropriate correction is required.

#### ***Claim Objections***

3. Claim 5 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 4. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yonekura et al.(European Patent Application Publication 1,367,808) in view of Ward et al.(US 2002/0151305).

Consider claim 1, Yonekura et al. teach:

A converter(2 and 3, figures 1, 3, 4, 8, 9) for image input device("Color Camera Module", 218, figure 9) and mobile device(4, figure 1, figure 2), comprising;

a control module(210, figure 9, 313, figure 4) to control operation of said image input device(Control section(210) controls the operation of the image input device(218), paragraphs 0053 and 0054.) and its communication with said mobile device(Control section(210) communicates data to the attachment(3), paragraph 0054. Control

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section(313, paragraph 0045) then transmits data from the attachment(3) to the mobile device(4), paragraph 0052.) and to set format for data exchange(See figure 10, paragraph 0046, and 0056-0059. The data exchange format is based on the cellular phone terminal(4) information, paragraphs 0057-0058.);

a data conversion module to convert, according to settings of said control module, data to be exchanged between said image input device(218) and said mobile device(The image data is converted according to settings such as the "communication protocol, data format, and the like used by the relevant cellular phone terminal(4)", paragraph 0057. This conversion is done via programs stored in the ROM of the connector(3), paragraphs 0057-0059, paragraphs 0046-0047. These settings are read from ROM and implemented by control module(313), paragraph 0045.); and

a data exchange format memory(ROM, 314) to record all kinds of necessary format information for data exchange to be used by said data conversion module(See figure 5, paragraphs 0046 and 0047. The ROM(314) contains all kinds of format information including data format conversion information(0046) and data transmission format information, paragraph(0047). The image data is converted according to settings such as the "communication protocol, data format, and the like used by the relevant cellular phone terminal(4)", paragraph 0057.).

However, although Yonekura et al. teach of storing format information and data conversion programs in the memory of the converter(see above rationale, figure 5), and that the converter performs data conversion based on the particular protocol received

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from the relevant cellular phone terminal(paragraphs 0057-0059), Yonekura et al. do not explicitly teach that the information is stored in the form of a look-up table.

Ward et al. is similar to Yonekura et al. in that Ward et al. teach of wireless communication(paragraph 0016), and of formatting data according to a particular protocol received from a relevant cellular phone terminal(paragraph 0087).

However, in addition to the teachings of Yonekura et al., Ward et al. teach that the data conversion information is stored in the form of a lookup table(See paragraph 0087. Message data is sent in a specific format according to the many factors, one of which is the "make and model of roaming cellular telephone". Data received regarding the relevant cellular phone is matched with lookup table to determine the appropriate format.).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to use a lookup table as taught by Ward et al. to match the relevant cellular phone and format conversion information taught by Yonekura et al. because lookup tables are often used to replace a runtime computation with a simpler lookup operation in which speed gain can be significant, since retrieving a value from memory is often faster than undergoing an expensive computation.

Consider claim 2, and as applied to claim 1 above, Yonekura et al. further teach: said mobile device(4) is mobile handset(see figure 1) and data recorded in said data exchange format memory(figure 5) include format information(3140-3151, figure 5) relating data exchange(paragraphs 0046-0047, 0051-0059) that are applicable to a

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plurality of mobile handsets(Yonekura et al. teach that data exchange format is based on the protocol setting data of the relevant cellular phone, paragraphs 0057-0059.).

However, Yonekura et al. do not explicitly teach that the format memory comprises a lookup table or that the relevant cellular phone information is stored according to known brand names and model numbers.

Ward et al. teach that the format memory comprises a lookup table(see claim 1 rationale, paragraph 0087), and that the relevant cellular phone information is stored according to known brand names and model numbers("make and model of the roaming cellular telephone", paragraph 0087).

Consider claim 3, and as applied to claim 1 above, Yonekura et al. further teach that said image input device(218, figure 9) is a digital camera(paragraphs 0052-0054).

Consider claim 3, and as applied to claim 2 above, Yonekura et al. further teach that said image input device(218, figure 9) is a digital camera(paragraphs 0052-0054).

Consider claim 4, and as applied to claim 1 above, Yonekura et al. further teach the converter(2 and 3) comprises a memory module(RAM, 315, figure 4) to store data including digitalized image data(paragraph 0050, figure 6).

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Consider claim 4, and as applied to claim 2 above, Yonekura et al. further teach the converter(2 and 3) comprises a memory module(RAM, 315, figure 4) to store data including digitalized image data(paragraph 0050, figure 6).

Consider claim 5, and as applied to claim 1 above, Yonekura et al. further teach the converter(2 and 3) comprises a memory module(RAM, 315, figure 4) to store data including digitalized image data(paragraph 0050, figure 6).

Consider claim 5, and as applied to claim 2 above, Yonekura et al. further teach the converter(2 and 3) comprises a memory module(RAM, 315, figure 4) to store data including digitalized image data(paragraph 0050, figure 6).

Consider claim 6, and as applied to claim 1 above, Yonekura et al. further teach a user interface(Switches S1-S5, and display 207, figure 8) allowing users to set factors used in said data conversion module(The switches S1-S5 allow a user to set whether the camera is transmitting data to the mobile terminal, or receiving data from the mobile terminal. In the case that data is being received, the data must be RGB data in order to be displayed on the display(207), paragraph 0075. In the case that data is being sent, the data can be converted from RGB data to multiple other formats(figure 5, paragraphs 0073, 0046). Therefore, the user sets factors used in the data conversion module by choosing to send or receive data, each of which requires different data conversion.).



Consider claim 6, and as applied to claim 2 above, Yonekura et al. further teach a user interface(Switches S1-S5, and display 207, figure 8) allowing users to set factors used in said data conversion module(The switches S1-S5 allow a user to set whether the camera is transmitting data to the mobile terminal, or receiving data from the mobile terminal. In the case that data is being received, the data must be RGB data in order to be displayed on the display(207), paragraph 0075. In the case that data is being sent, the data can be converted from RGB data to multiple other formats(figure 5, paragraphs 0073, 0046). Therefore, the user sets factors used in the data conversion module by choosing to send or receive data, each of which requires different data conversion.).

Consider claim 7, and as applied to claim 1 above, Yonekura et al. further teach a connection means(connector, 301, figure 4) to establish communication between said converter and said mobile device(paragraph 0042).

Consider claim 7, and as applied to claim 2 above, Yonekura et al. further teach a connection means(connector, 301, figure 4) to establish communication between said converter and said mobile device(paragraph 0042).

7. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yonekura et al. in view of Ward et al. as applied to claim 7 above, and further in view of Lo(US 2005/0043057).

Consider claim 8, and as applied to claim 7(1) above, Yonekura et al. teach of a connection means(301, figure 4, claim 7 rationale). Yonekura et al. also teach that the attachment(3) has wireless communication capabilities(316, figure 4). However, the combination of Yonekura et al. and Ward et al. does not explicitly teach that the connection means is a wireless communication component.

Lo is similar to Yonekura et al. in that Lo teaches of a mobile phone(14) connected to a camera(12) via an attachment(10), figure 1.

However, in addition to the teachings of Yonekura et al. and Ward et al., Lo teaches that the attachment(10) can communicate with the mobile phone(14) via a wireless communication component("Bluetooth wireless network protocol", paragraph 0020).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to use the wireless capabilities of the conversion device taught by the combination of Yonekura et al. and Ward et al. to communicate with the mobile phone as taught by Lo for the benefit of creating a more compact and versatile device in which the attachment and mobile phone do not require a physical connection.

Consider claim 8, and as applied to claim 7(2) above, Yonekura et al. teach of a connection means(301, figure 4, claim 7 rationale). Yonekura et al. also teach that the attachment(3) has wireless communication capabilities(316, figure 4). However, the combination of Yonekura et al. and Ward et al. does not explicitly teach that the connection means is a wireless communication component.

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Lo is similar to Yonekura et al. in that Lo teaches of a mobile phone(14) connected to a camera(12) via an attachment(10), figure 1.

However, in addition to the teachings of Yonekura et al. and Ward et al., Lo teaches that the attachment(10) can communicate with the mobile phone(14) via a wireless communication component("Bluetooth wireless network protocol", paragraph 0020).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to use the wireless capabilities of the conversion device taught by the combination of Yonekura et al. and Ward et al. to communicate with the mobile phone as taught by Lo for the benefit of creating a more compact and versatile device in which the attachment and mobile phone do not require a physical connection.

Consider claim 9, and as applied to claim 7(1) above, Yonekura et al. teach of a connection means(301, figure 4, claim 7 rationale). Yonekura et al. also teach that the connector(301) is plugged into a slot(414) of a mobile device(4, paragraph 0042). In addition, Yonekura et al. teach that the connector(3) has USB capabilities(306, figure 4). However, the combination of Yonekura et al. and Ward et al. does not explicitly teach that the connection means comprises a wired number.

Lo is similar to Yonekura et al. in that Lo teaches of a mobile phone(14) connected to a camera(12) via an attachment(10), figure 1.

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However, in addition to the teachings of Yonekura et al. and Ward et al., Lo teaches that the attachment(10) can comprise a USB connection(i.e. a wired number, paragraph 0020).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to use the USB capabilities of the conversion device taught by the combination of Yonekura et al. and Ward et al. to communicate with the mobile phone as taught by Lo for the benefit of creating a more compact device by eliminating the need for an internal power supply by powering the connector via the USB connection to the mobile phone, and creating a more versatile device which can connect to many different cellular devices via the standardized USB interface.

Consider claim 9, and as applied to claim 7(2) above, Yonekura et al. teach of a connection means(301, figure 4, claim 7 rationale). Yonekura et al. also teach that the connector(301) is plugged into a slot(414) of a mobile device(4, paragraph 0042). In addition, Yonekura et al. teach that the connector(3) has USB capabilities(306, figure 4). However, the combination of Yonekura et al. and Ward et al. does not explicitly teach that the connection means comprises a wired number.

Lo is similar to Yonekura et al. in that Lo teaches of a mobile phone(14) connected to a camera(12) via an attachment(10), figure 1.

However, in addition to the teachings of Yonekura et al. and Ward et al., Lo teaches that the attachment(10) can comprise a USB connection(i.e. a wired number, paragraph 0020).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to use the USB capabilities of the conversion device taught by the combination of Yonekura et al. and Ward et al. to communicate with the mobile phone as taught by Lo for the benefit of creating a more compact device by eliminating the need for an internal power supply by powering the connector via the USB connection to the mobile phone, and creating a more versatile device which can connect to many different cellular devices via the standardized USB interface.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert H. Cutler whose telephone number is (571)-270-1460. The examiner can normally be reached on Mon-Fri (7:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc-Yen Vu can be reached on (571)-272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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LIN YE  
PRIMARY PATENT EXAMINER